Amendments to the Claims

Listing of the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

1. (**Currently Amended**) A design method of a product with three-dimensional model, wherein:

a three-dimensional CAM model is prepared, a CAE analysis is performed for said three-dimensional CAM model, and then drawings of the product are prepared with results of said CAE analysis,

wherein the three-dimensional CAM model is divided into a plurality of meshes, the CAE analysis calculation, and a post-calculation display process are performed automatically.

2. (**Currently amended**) A design method of a product with three-dimensional model, comprising:

(1) a first step to prepare a three-dimensional CAM model;

(2) a second step to perform a CAE analysis for said three-dimensional CAM model;

(3) a third step to correct said three-dimensional CAM model on the basis of said CAE analysis if defects exist;

(4) a fourth step to manufacture a trial product on the basis of said three-dimensional CAM model;

(5) a fifth step to test said trial product; and

(6) a sixth step to prepare drawings on the basis of results of said test, wherein the three-dimensional CAM model is divided into a plurality of meshes, the CAE analysis calculation, and a post-calculation display process are performed automatically.

3. (**Currently Amended**) A design method of a product with three-dimensional model, comprising:

(1) a first step to prepare a three-dimensional CAM model;

(2) a second step to perform a CAE analysis for said three-dimensional CAM model;

(3) a third step to correct said three-dimensional CAM model on the basis of said CAE analysis if defects exist;

(4) a fourth step to manufacture a trial product on the basis of said three-dimensional CAM model;

(5) a fifth step to test said trial product;

(6) a sixth step to correct said three-dimensional CAM model on the basis of results of said test if the defects exist;

(7) a seventh step to iterate said fourth through sixth steps until the defects are solved; and

(8) an eighth step to prepare drawings on the basis of the three-dimensional CAM model obtained at said seventh step.

wherein the three-dimensional CAM model is divided into a plurality of meshes, the CAE analysis calculation, and a post-calculation display process are performed automatically.

4. (Previously Presented) The design method according to Claim 1, wherein the CAE analysis is performed in a three-dimensional CAD system.

5. (Canceled)

6. (Previously Presented) The design method according to Claim 1, wherein the CAE analysis is one of a stress analysis, port flow analysis, thermal conduction analysis, and combustion analysis.

7. (Previously Presented) The design method according to Claim 2, wherein the CAE analysis is performed in a three-dimensional CAD system.

8. (Canceled)

9. (Previously Presented) The design method according to Claim 2, wherein the CAE analysis is one of a stress analysis, port flow analysis, thermal conduction analysis, and combustion analysis.

10. (Previously Presented) The design method according to Claim 3, wherein the CAE analysis is performed in a three-dimensional CAD system.

11. (Canceled)

12. (Previously Presented) The design method according to Claim 3, wherein the CAE analysis is one of a stress analysis, port flow analysis, thermal conduction analysis, and combustion analysis.

13. (Currently Amended) A design method of a product with a three-dimensional model, wherein:

a three-dimensional CAM model, which is a detailed three-dimensional model representative of a final shape of the product, is prepared;

a CAE analysis is performed for said three-dimensional CAM model; and

drawings of the product are prepared with results from said CAE analysis,

wherein the three-dimensional CAM model is divided into a plurality of meshes, the CAE analysis calculation, and a post-calculation display process are performed automatically.

14. (Currently Amended) A design method of a product with a three-dimensional model, comprising the following steps of:

(1) preparing a three-dimensional CAM model, which is a detailed three-dimensional model representative of a final shape of the product;

(2) performing a CAE analysis for said three-dimensional CAM model;

(3) correcting said three-dimensional CAM model based on said CAE analysis if a defect exists;

(4) manufacturing a trial product based on said three-dimensional CAM model;

(5) testing said trial product; and

(6) preparing drawings based on results of said testing,

wherein the three-dimensional CAM model is divided into a plurality of meshes, the CAE analysis calculation, and a post-calculation display process are performed automatically.

15. (Currently Amended) A design method of a product with a three-dimensional model, comprising the following steps of:

(1) preparing a three-dimensional CAM model, which is a detailed three-dimensional model representative of a final shape of the product;

(2) performing a CAE analysis of said three-dimensional CAM model;

(3) correcting said three-dimensional CAM model based on said CAE analysis if defects exist;

(4) manufacturing a trial product based on said three-dimensional CAM model;

(5) testing said trial product;

(6) correcting said three-dimensional CAM model based on results of said testing if the defects exist;

(7) repeating steps (4) through (6) until the defects are solved; and

(8) preparing drawings based on said three-dimensional CAM model obtained during step (7).

wherein the three-dimensional CAM model is divided into a plurality of meshes, the CAE analysis calculation, and a post-calculation display process are performed.